SBR No. 21/22-23
DATED 05/09/2022

Original/Duplicate/Triplicate

CONTRACT CERTIFICATE

(For Other Works)

EE/ELE/Y/BR No. 21/22-23

Date.....2010 Dt. 05/09/22

No. 1st & Final bill

Division: **Electrical (yelahanka)**

Sub-Division: **Electricals**

Bill Received No. Dated

Divisional

Sub Divisional

Cash Book Voucher No..... Dated.....

Job Code :-004-21-000037

Schedule Docket No.

Head of Account : P-CODE:P0300 D.R.No. :

Name of Work Replacing burntout UG Cables and Deteriorated Street lights by LED Street Lights to Allalsandra ROB Yalahanka Main road Ward No 04

Name of Contractor and Full Address: **M/s Prashanth Electricals.**

Reference to Agreement No:- EE(ele)/YZ/W.O/000007/2021-22 Date 17/11/2021

Certified that the measurements were taken by me on 7/6/22 and recorded of Pages 257 to 340 to 7345 of measurement Book No. 2574/21-22 and that the work is satisfactorily executed.

For PRASHANTH ELECTRICALS

Proprietor

Contractor

Officer-in-charge of work

Certified that the measurement were taken by me on 7/6/22 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Assistant Executive Engineer (E-1)

Sub-Division Officer

II Memorandum of Payment

1) Total value of work done or supplies made as per account within	Bill Amount	933350:00
2) Deduct amount to be held in reserve being .....percent Rs.....	IT 1%	9334:00
3) " Balance	LWC 1%	9334:00
4) Deduct Payment:	Amount adjusted CBF 0.1%	933:00
a) Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D. No..... towards cash advance recovery of	CGST 1%	8554:00
	SGST 1%	8554:00
b) Payments Now made } cost store or other material supplied. recovery of amount creditable to this/other work Amount paid on this bill Cheque / Cash.	Fine	12091:00
5) Balance being unpaid value of work done held in reserve.	Deduction unadjustments items.	48800:00
6) Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.	Bycheque Total amount adjusted -	884550:00
7) Net amount due to or from Contractor		
8) Advance to Contractor for materials brought to site (as detailed) within.		
9) Value of Government materials supplied.		

For PRASHANTH ELECTRICALS

Contractor's Signature

Received Rs..... (in words).....

.....

by cash and by adjustment of Payment as per memorandum

(in final settlement of all demands)

Proprietor

Witness

1.

2.

For PRASHANTH ELECTRICALS

Dated Signature of Contractor

Paid by me by Cheque No.....Dated.....

Proprietor

Cash Rs.....

Dated.....

Initials of Officer making payment

(For use in the Office)

ಲೆಕ್ಕಶೀರ್ಷಿಕೆ P0300. Mondha to Steadley

Stamp

ರೂ: 933350:00 ಆಡಿಟ್ ಮಾಡಿ ಸ್ವೀಕರಿಸಿದೆ

ರೂ: 884550:00 ಚೆಕ್ ನೀಡಬಹುದಾಗಿದೆ

ರೂ: 48800:00 ಹೊಂದಾಣಿಕೆ ಮಾಡಿದೆ

ಲೆಕ್ಕ ಅಧೀಕ್ಷಕರು

Executive Engineer

ಕಾ.ಪಾ.ಅ.(ವಿ) ಯಲಹಂಕ ವಲಯ

Sl. No	Description
	Name Of Work:- Replacing burntout UG Cables and Deteriorated Street lights by LED Street Lights to Allalsandra ROB Yalahanka Main road Ward No 04
1	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Streetlight 120 Watts
2	.Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/ IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in- house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Floodlight 200W
3	Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/ IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with... W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in- house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Floodlight 240W
4	Supplying and Fixing of. mm dia class A GI pipe bracket up to 2 Mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires.Using 32mm dia G.I.Pipe
5	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.
6	Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop- Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/ Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets.260mmx210mmx116mm
7	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. 2) 50x50x6mm
8	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) THREE POLE, 1) 100Amps 25kA.

evious Measurement		Present Measurement			Total Upto Date		Remarks
Qty	Cost	Qty	Rate	Amount	Qty	Cost	
		40	5888.00	235520.00	40	235520.00	
		15	11520.00	172800.00	15	172800.00	
		4	11776.00	47104.00	4	47104.00	
		30	534.00	16020.00	30	16020.00	
		59	112.00	6608.00	59	6608.00	
		50	1314.56	65728.00	50	65728.00	
		18	211.20	3801.60	18	3801.60	
		3	2899.20	8697.60	3	8697.60	

9	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete. 1) 14SWG	Mtr
10	Supplying and fixing hylum plastic sheet 3mm thick with necessary nitches for fixing switches, regulators etc., and fixing on existing wood or metal box using N.F. screws.	Sqcm
11	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm	Mtr
12	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.On wall /Structure 6 sqmm to 16 sqmm	Mtr
13	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments.10. sqmm	Mtrs
14	Wiring for lighting/power circuit using one of PVC insulated 1100V grade, stranded Aluminium wire single core in open or concealed system of wiring. 4 sqmm	Mtrs
15	Hiring of 35 tons capacity Crane for releasing and refixing of High Mast	Hrs
16	Supplay and erection of Single phase Thyristor based smart street light control system consisting of following aquipments 1. Precise turn ON & OFF of street lights on pre programmed data 2. 2 x 16 character LCD display unit to display date, status ON Or OFF , turn ON & OFF time, 3. Keypad to set/edit ON & OFF time as per the end user 4. Microcontroller with Real Time Clock and associated hardware 5. 1 No, SCR 162 amps thyristor module for load switching mounted on an extruded alluminium heat sink 6. Thyristor Driver Card: Driver control circuit to switch ON & OFF the Thyristor module 7. Firmware: Firmware to control the hardware and display the required data 8. Power Supply: AC to DC conversion circuit required for the electronic circuitry and driver control card 9. Enclosure is made out of 18 swg CRCA ms sheet of size H480xW310XD200mm with luvers for Heat dissipation IP65 weather proof metal enclosure 10. Wiring & other components like wiring, connectors ,insulators, Alluminium Bus bar and 2 nos of 125 amps single pole MCB for main power Supply control and Manual On & off operation & etc complete.	Nos
17	Supplying off1.1 kV, LT Aerial Bunched Cable, confirming to IS-14255: 1995 XLPE insulation Parameter shall be as below 1. Hot Set Test: a) Elongation under Load: 50% (Max) b) Permanent Elongation After Cooloing: 3% (Max) 2. Thermal Aging in oven: a) Tensile Strength: 16 N/mm² (Min) b) Elongation: 375% (Min) 3. Water Absorption Test a) Water absorbed: 0.5 mg/cm² (Max) 4. Carbon Black Content shall be ranging from 2% to 3% . 3 X 25 + 1 X 25 + 1 X 16 SQ.MM (Insulated Messenger cum Neutral)	Per Mtr
18	Stringing of 1.1kV grade aerial bunched 3 core cable of XLPE insulation of size (3x95) (for Phase conductor) + (1x70) (insulated messenger neutral) + (1x25) for street light control.	Mtr
19	LT 2 Pin X Arms - MS (Dwg No. BESCOM/GM/QS&S/32 Dtd 24.11.2018	Nos

		99000	0.26	25740.00	99000	25740.00	
		8000	0.15	1200.00	8000	1200.00	
		498	96.00	47808.00	498	47808.00	
		498	19.20	9561.60	498	9561.60	
		17	73.60	1251.20	17	1251.20	
		395	5.76	2275.20	395	2275.20	
		15	350.72	5260.80	15	5260.80	
		7	20390.40	142732.80	7	142732.80	
		497	94.08	46757.76	497	46757.76	
		497	14.37	7141.89	497	7141.89	
		15	55.68	835.20	15	835.20	

20	RCC Pole clamp - MS (Dwg No. BESCOM/GM/QS&S/30 Dtd 24.11.2018)	Nos
21	Supplaying of Piercing Connector Suitable for 16 Sqmm - 95 Sqmm AB Cable - Street Light Connections	Nos
22	Supplaying of Dead End Clamp/Anchor Clamp Assembly 25 to 95 Sqmm Bare Messenger(Exclusive of pole clamp and eye hook)	Nos
23	Installation of Insulation piercing connector for main to street light Main:16-95sqmm,Tap :1.5-10sqmm(EP95)	Nos
24	Fixing of Universal/ Dead end Hook	Nos
25	Supplay of Suspension Clamp Assembly 16 to 70 Sqmm Bare Messenger(Exclusive of pole clamp and eye hook) 284845 No	Nos
26	Erection of Suspension Clamp - 25 to 95 sqmm bare messenger	
	Total Rs	
	GST Charges (12% on SR Electrical items) Item No 01 to 15	
	Total Rs	

Certificate: 1. Certefied that the Above Work has been carreid out satisfactorily

Assistant Executive Engineer (E/n)
BBMP, Bangalore

		15	33.92	508.80	15	508.80	
		30	105.60	3168.00	30	3168.00	
		4	86.40	345.60	4	345.60	
		30	37.76	1132.80	30	1132.80	
		4	81.28	325.12	4	325.12	
		15	125.44	1881.60	15	1881.60	
		15	81.28	1219.20	15	1219.20	
	649376.00			**855424.77**		**855424.77**	
				77925.12		77925.12	
				933349.89		**933349.89**	